

Alpha Test Plan Guidance

Date

Version Number

1. Project Information

CTA or Portfolio:

CHSSI Project Number:

Project Title:

Principal Investigator:

2. Software Test Environment¹

System	Processors to be Used for Computation	Location	Site Point of Contact
SGI Origin 2000 ²	64	ARL, Aberdeen	Ron Smith, smith@arl.spot ###-###-####

3. Alpha Test Participants and Users³

Name and Title	Organization and Position	Commercial Phone Number and E-mail Address	Purpose of Using the Software

¹ List the **HPCMP** systems to be used in the test event as shown in the example. Since the software developed under CHSSI must be ported to multiple platforms, the test plan must take this into account. Each performance CTP must be tested and reported for all targeted platforms. For example, if a project claims scalability on three platforms as an optimum threshold, then each performance CTP should be tested and reported on all three platforms.

Include the site point of contact you will work with to coordinate testing requirements and schedules as well as his/her email and voice telephone number.

² This is a sample line.

³ List the approved Alpha SME and any primary users of the Alpha version of the software. If this list is extensive, include it as an attachment to the plan.

4. Test Case Scenarios⁴

4.1 Source of Baseline Data⁵

4.2 Expected Results⁶

5. Testing

5.1 Critical Technical Parameters⁷

CTP Title	Parameters		CTP-Specific Detail ⁸
	Optimum Objectives	Minimum Threshold	
9			

5.2 Methods to Obtain Metrics¹⁰

⁴ Describe the computational problems for the Alpha test event that will be solved using this software. Provide detailed information so that personnel not involved in the field may understand. Explain how the scenario or test case will demonstrate the software's capabilities and why the particular test case or scenario was selected.

⁵ Identify the source of the baseline data (non-scalable legacy software, analytical solution, etc.).

⁶ Specify the expected computational solution as well as the acceptable error (variance) factor and explain why the variance is acceptable.

⁷ Identify the Critical Technical Parameters (both optimum and minimum threshold) that will be evaluated during Alpha testing. These are contained within the latest approved Software Development Plan.

⁸ Describe any specific methods, requirements, assumptions, constraints or considerations of particular relevance to the CTP. It is critical that this section contain as much information as necessary to fully explain the characteristics of the CTP, test cases and scenarios, and other information pertinent to understanding the test process and the results. Blank, "None", "Not Applicable" or other words to that effect should NOT be used for this section.

⁹ Insert a row for each CTP being tested at the Alpha test event(s).

¹⁰ Identify the method(s) to qualify and quantify the test values/results. The test data and ensuing results must be documented for each platform used in the test event. The results must be provided in an MS Excel workbook, along with the Alpha SME's test report. Column headings shall include the type of platform (e.g., Origin 2000, IBM-SP, Cray T3E, etc.).

5.3 Special Requirements¹¹

5.4 Assumptions and Constraints¹²

5.5 Special Considerations¹³

6. Reporting¹⁴

7. Review¹⁵

¹¹ Specify any special requirements (for example, 48 hours of continuous facility time, weapon simulation, extent of test, use of a special input or database).

¹² Describe any assumptions and constraints, such as anticipated limitations on the test due to system or test conditions, timing, interfaces, equipment, personnel, database, etc.

¹³ Identify all safety, security, and privacy considerations associated with the test and the methodology used to mitigate them.

¹⁴ Specify how the data and the results of the testing will be documented. Recommend citing the Alpha SME's Test Report and the CTA/Portfolio Leader's Evaluation Report.

¹⁵ Use the following text: "The results of the Alpha test event will be presented to the Project Manager for Software Applications Support who will determine if a formal Alpha Review will be required."